Claims

[c1] 1.An inspection method for a semiconductor circuit with a plurality of connected semiconductor devices comprising the steps of applying an electrical load on the circuit, taking a photograph of the circuit with a thermographic camera to detect heat development of each semiconductor device in response to the applied load, and determining the quality of circuit and semiconductor devices based on the heat development.

[c2] 2.The inspection method for a semiconductor circuit according to claim 1, wherein at least some of the semiconductor devices are connected in parallel.

[c3] 3.The inspection method for a semiconductor circuit according to claim 1, wherein temperatures of the semiconductor devices are measured at different points of time, and the quality of the circuit and semiconductor devices is determined based on the temperature difference.

[c4] 4.The inspection method for a semiconductor circuit according to claim 3, wherein temperatures of the semiconductor devices are measured at different points of time at least twice to detect the heat development characteristic of each semiconductor device, and the quality the circuit and semiconductor devices is determined based on the heat development characteristic, together with the cause if the circuit and semiconductor devices is determined to be defective.

[c5] 5.The inspection method for a semiconductor circuit according to claim 4, wherein said semiconductor devices are power controlling power devices installed in a rotating equipment control unit.

[c6] 6.An inspection apparatus for a workpiece consisting of a semiconductor circuit with a plurality of connected semiconductor comprising an apparatus body on which a workpiece to be inspected is set, a loading circuit for applying load corresponding to the condition of use to the workpiece, a power source for supplying a working current to the workpiece through said loading circuit, a drive waveform generating circuit for applying a drive signal to said workpiece, a thermographic camera for taking photographs of the workpiece set on said

apparatus body, an image processor connected to said thermographic camera, and a control for controlling said inspection apparatus to perform an inspection program.